

ABSTRACT

System and Method for an Auto-Tracking, Self-Calibrating Voltage Generator

A self-calibrating an auto-tracking voltage regulation method and system is provided that
5 includes a superior voltage reference and a less stable operating voltage reference. The
superior voltage reference may be a thermal resistor heated zener (TRZ) that is turned on
only during a relatively low duty cycle sampling period. An error signal generator
compares the superior voltage reference and a feedback voltage to generate an error
signal based thereon. An error correction unit combines the error correction signal and
10 the operating voltage reference to produce a calibrated output voltage that has a greater
voltage stability than the operating voltage reference.